



Mayor Russell G. Lloyd, Jr.

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September 16, 2003

Mr. Daniel Ziemer
Ziemer Funeral Home, Inc.
800 S. Hebron Avenue
Evansville, IN 47714

Re: Exempt Construction and Operation Status,
163-17776-00168

The application from Ziemer Funeral Home, Inc. received on August 4, 2003, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following equipment to be located at 621 North Second Avenue, Evansville, Indiana 47710, is classified as exempt from air pollution permit requirements:

- (1) One (1) crematory incinerator for human remains, with a maximum capacity of 150 pounds per hour, supplemented by natural gas at a rate of 2.25 million British Thermal Units per hour (mmBTU/hr).

The following conditions shall be applicable:

- (1) Opacity Limitations [326 IAC 5-1-2]
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity) monitor in a six (6) hour period.
- (2) Incinerators [326 IAC 4-2-2]
Pursuant to 326 IAC 4-2-2, all incinerators shall comply with the following requirements:
 - (a) Consist of primary and secondary chambers or the equivalent;
 - (b) Be equipped with a primary burner unless burning only wood products;
 - (c) Comply with 326 IAC 5-1 and 326 IAC 2.

- (d) Be maintained, operated, and burn waste in accordance with the manufacturer's specifications.
- (e) Not emit particulate matter in excess of:
 - (1) five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with solid waste capacity less than two hundred (200) pounds per hour.

If any of the requirements of subdivisions (a) through (e) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by:
Alma Mifflin
Permitting Specialist

cc: IDEM-OAQ

**Indiana Department of Environmental Management
Office of Air Quality
and
Evansville Environmental Protection Agency**

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: Ziemer Funeral Home, Inc.
Source Location: 621 N. Second Avenue, Evansville, Indiana 47710
County: Vanderburgh
SIC Code: 7261
Operation Permit No.: 163-17776-00168
Permit Reviewer: Alma Mifflin, Evansville EPA

The Evansville EPA and the Office of Air Quality (OAQ) has reviewed an application from Ziemer Funeral Home, Inc. relating to the construction and operation of a crematory incinerator.

Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) one (1) crematory incinerator for human remains and containers, with a maximum capacity of one hundred and fifty (150) pounds per hour, supplemented by natural gas at a rate of 2.25 million British Thermal Units per hours (mmBtu/hr).

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
#1	Crematory Incinerator	13	33 3/8"	2243	1622

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 4, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 2.)

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.

Pollutant	Potential To Emit (tons/year)
PM	NA
PM-10	.23
SO ₂	.19
VOC	.16
CO	0.0
NO _x	1.1
HAPs	.16

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.

County Attainment Status

The source is located in Vanderburgh County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Attainment
CO	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vanderburgh County has been designated as attainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Vanderburgh County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) The incinerator has a charge rate of less than fifty (50) tons per day. Therefore, it is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.50, Subpart E).
- (b) The crematory incinerator does not combust any hazardous waste as defined in 40 CFR 261. Therefore, the incinerator is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs)(40 CFR 63, Subpart EEE).

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source, located in an attainment area, has the potential to emit of all criteria pollutants less than one hundred (100) tons per year, and is not one of the twenty-eight (28) listed source categories. Therefore, 326 IAC 2-2 does not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs))

The operation of the crematory incinerator will emit less than ten (10) tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Vanderburgh County and the potential to emit VOC is less than ten (10) tons per year, and that of all other criteria pollutants is less than one hundred (100) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 4-2-2 (Incinerators: requirements)

Pursuant to 326 IAC 4-2-2, the crematory incinerator shall:

- (1) consist of primary and secondary chambers or the equivalent;

- (2) be equipped with a primary burner unless burning only wood products;
- (3) comply with 326 IAC 5-1 and 326 IAC 2;
- (4) be maintained, operated, and burn waste in accordance with the manufacturer's specifications or an operation and maintenance plan as specified in subsection (c).
- (5) Not emit particulate matter in excess of five-tenths (0.5) pound of particulate matter per one thousand (1000) pounds of dry exhaust gas under standard conditions corrected to fifty percent (50%) excess air for incinerators with solid waste capacity less than two hundred (200) pounds per hour.
- (6) If any of the requirements of subdivisions (1) through (5) are not met, then the owner or operator shall stop charging the incinerator until adjustments are made that address the underlying cause of the deviation.
- (7) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators.

326 IAC 6-3-2 (Process Operations)

Incinerators are exempt from this rule. Therefore, 326 IAC 6-3-2 does not apply.

Conclusion

The construction and operation of this crematory incinerator shall be subject to the conditions of the attached Exemption No. 163-17776-00168.